

## ATTENTION ANGLERS

Viral hemorrhagic septicemia (VHS) is a fish disease caused by a virus that has produced large-scale fish kills in aquaculture operations in Europe and in wild herring and pilchard populations along the Pacific Coast of North America. VHS was first identified in the Great Lakes in 2005 and has caused mortalities in a number of fish species in the Michigan waters of Lake Huron, Lake St. Clair, St. Clair and Detroit Rivers, Lake Erie and inland in Budd Lake near Harrison. It has been found in Lake Michigan waters of Wisconsin, but not in Michigan waters so far.

Believed to have arrived in the Great Lakes in ballast water of ocean-going ships from the Maritime Provinces of Canada, VHS kills by causing internal bleeding. Although it has been associated with mortalities in muskellunge, walleye, drum and other species, it does not always affect all vulnerable species when it occurs. No one is sure exactly what triggers VHS outbreaks in a population but stressful conditions (crowding, poor nutrition, etc.) will cause outbreaks.

There is no known treatment for VHS in endemic waters, so preventing the spread of the disease is the best way to protect fish stocks. Anglers can help prevent the spread of VHS by taking two simple precautions: Do not move fish or water from one water body to another.

Anglers are asked to empty their live wells and bilges when they pull out of a lake and to disinfect their live wells. A solution of one-half cup of bleach in five gallons of water kills the virus.

Live fish -- including bait fish -- should never be moved from one body of water to another. Empty bait buckets on land. Dispose of minnows in the trash or garden.

Anglers who trap or net their own minnows -- or who collect their own roe -- should only use them in the body of water from which they were taken. It is illegal to fish with bait taken from water where VHS is known to exist in waters where it does not.

Certified disease-free minnows and roe are widely available at Michigan bait stores and can be used anywhere in the state. Do not bring bait in from out of state. Generally speaking, anglers who do not catch their own bait must use certified disease-free bait or locally caught bait in Lake Superior and its entire watershed, Lac Vieux Desert, the Lake Michigan watershed waters upstream from the first Great Lakes fish barrier, the St. Marys River and its tributaries, and the inland waters of the Lake Huron and Lake Erie watersheds upstream from the first barrier. (For complete regulations please see "Angler Fact Sheet" elsewhere on this Web site.)

In the VHS Positive Management Areas of Lake Huron, Lake St. Clair, St. Clair River, Detroit River, and Lake Erie along with waters below the first fish barrier in those waters, anglers can use any bait.

Although fish die-offs are not uncommon and occur for a number of reasons, the Department of Natural Resources asks anglers to report any unusual large-scale occurrences of dead or dying fish to their local DNR office immediately or can report them elsewhere on this Web site. Fisheries officials want to sample the fish as soon as possible.